

AMENDMENTS TO THE SPECIFICATION

Insert the following section heading on page 1 after the title of the invention:

- - TECHNICAL FIELD OF THE INVENTION - -.

Insert the following section heading on page 1 after the first complete paragraph:

- - DESCRIPTION OF RELATED ART - -.

Replace the third complete paragraph on page 4 with the following rewritten version:

- - BRIEF SUMMARY OF THE INVENTION

~~It is an object of the invention to provide~~ a method and a moulding device for closed moulding, which overcome the disadvantages related to the vacuum foil technique and the disadvantages related to the (semi) rigid moulding technique. In particular, ~~it is an object of the invention to provide~~ a vacuum infusion technique or vacuum assisted moulding for RTM where the “back form” is reusable and which is suitable for moulding large fibre reinforced composite products. - -

Replace the last paragraph on page 4 with the following rewritten version:

- - BRIEF DESCRIPTION OF THE DRAWINGS

The invention is ~~herein the following~~ described in detail with reference to the accompanying drawings, in which:

- Fig. 1 is a schematic cross-sectional view of a closed moulding process according to an embodiment of the invention;
- fig. 2 is a schematic view of a second embodiment of the invention;
- fig. 3 is a schematic cross-sectional view of a third embodiment of the invention;
- and - -.

Insert the following section heading on page 9 before the first complete paragraph:

- - DETAILED DESCRIPTION OF THE INVENTION - -.

AMENDMENTS TO CLAIMS:

Please replace the claims with the following rewritten listing:

1. (Currently Amended) A method of manufacture of reinforced composite products in a closed mould process, ~~whereby comprising:~~

defining a product moulding volume ~~is defined~~ between a first and a second mould part ~~and wherein~~ the moulding volume is in fluid contact to at least one moulding material reservoir and a vacuum source, ~~whereby;~~

drawing the moulding material ~~is drawn~~ into the moulding volume when the vacuum is applied to the moulding volume, wherein the first mould part comprises an inner liner of a pre-shaped, flexible modified fluorinated plastic foil and wherein the mould parts are clamped together before the vacuum is applied; and

detaching the mould parts ~~are detached~~ from each other when a predetermined amount of resin-moulding material is filled into the moulding volume, so that the moulded composite product may be removed and the mould is ready for repeating the moulding process.

2. (Currently Amended) A method according to claim 1, ~~whereby~~ wherein the first mould part is a female mould part and the second mould part is a male mould part.

3. (Currently Amended) A method according to claim 1 ~~or 2, whereby~~ further comprising providing reinforcement fibre material ~~are provided~~ in the moulding volume prior to ~~the~~ an assembly of the first and second mould parts.

4. (Currently Amended) A method according to ~~any of the claims 1 to 3, whereby~~ wherein the reinforcement material ~~is comprises~~ at least one of a glass, a stone, a ceramic, a carbon, an organic fibre fabric, and a synthetic fibre fabric.

5. (Currently Amended) A method according to ~~any of the preceding claims 1,~~
whereby in an the inner surface of the foil is smooth.
6. (Currently Amended) A method according to ~~any of the claims 1 to 4, whereby~~
wherein an the inner surface of the foil is structured.
7. (Currently Amended) A method according to claim 6, ~~whereby~~ wherein the
mould parts are assembled and since the structured surface of the foil allows a flow of
air to be transported towards the vacuum outlet of the moulding volume, vacuum is
applied and gelcoat is drawn or injected into the mould, after curing the mould is
opened before the reinforcement fibres are provided and the mould is reassembled and
closed moulding process is executed.
8. (Currently Amended) A method according to ~~any of the preceding claims 1,~~
whereby in the inner liner is translucent.
9. (Currently Amended) A method according to ~~any of the preceding claims 1,~~
~~whereby~~ further comprising assembling the first and second mould parts ~~are assembled~~
over an annular airtight sealing member encompassing the moulding volume carrying
the inner liner, ~~thus~~ said airtight sealing member belonging to the second mould part,
which may be clamped onto the first mould part.
10. (Currently Amended) A method according to claim 9, ~~whereby~~ wherein the
sealing member comprises two annular sealing members defining an annular sealing
volume around the moulding volume, and the vacuum is applied to ~~this~~ annular
sealing volume.
11. (Currently Amended) A method according to claim 10, whereby in the a
vacuum in the sealing volume is larger than ~~the a~~ vacuum in the moulding volume
during the vacuum forming process.

12. (Currently Amended) A method according to ~~any of the preceding claims 1~~, whereby in the foil is a fluoroplastic laminated foil, ~~preferably~~ with a thickness of 0.05 to 1.5 mm, which can be assembled in small or big panels suited to the products to be moulded.

13. (Currently Amended) A method according to ~~any of the preceding claims 1~~, whereby in prior to initiating the moulding process ~~is initiated~~, a reinforcement fibre mat is placed over the inner liner which in turn is placed over ~~the~~ an airbag, which is then inflated ~~so it to~~ fills out ~~the a~~ space inside ~~one of the other~~ first and second mould parts and to puts the inner liner and the fibre reinforcement in place relative to the other mould form part.

14. (Currently Amended) A method according to ~~any of the preceding claims 1~~, whereby in the moulding material is supplied into the moulding volume under pressure using vacuum assisted pressure injection.

15. (Currently Amended) A moulding device for ~~the~~ manufacture of composites in a closed mould process, ~~whereby comprising~~:

a product moulding volume ~~is defined~~ between a first and a second mould part, ~~and the~~ moulding volume ~~is being~~ in fluid contact ~~to with~~ at least one moulding material reservoir and a vacuum source, whereby in the moulding material is drawn into the moulding volume when the vacuum is applied to the moulding volume;

wherein the first mould part comprises an inner liner of a pre-shaped, flexible modified fluorinated plastic foil and wherein the mould parts are clamped together before the vacuum is applied and detached again when the moulding volume is filled and the moulding process is over, such that the moulded member may be removed and the mould is ready for repeating the moulding process.

16. (Original) A moulding device according to claim 15, wherein the first mould part is a female mould part and the second mould part is a male mould part.

17. (Currently Amended) A moulding device according to claim 15 ~~or 16~~, wherein ~~a reinforcement fibre material are~~ is provided in the moulding volume prior to ~~the~~ an assembly of the first and second mould parts.

18. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 17, wherein the reinforcement material ~~is~~ comprises at least one of a glass, ~~a~~ stone, ~~a~~ ceramic, ~~a~~ carbon, ~~an~~ organic fibre fabric, and ~~a~~ synthetic fibre fabric.

19. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 18, wherein ~~the~~ an inner surface of the foil is smooth.

20. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 18, wherein ~~the~~ an inner surface of the foil is structured.

21. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 20, wherein the inner liner is translucent.

22. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 21, wherein the foil is a laminate ~~consisting of at least two, preferably three~~ comprising a plurality of layers of fluoroplastic material; selected from ~~a~~ the group consisting of PFA (perfluoro alkoxy), FEP (Fluorinated ethylene propylene, TFE (tetra flour ethylene), ETFE (ethylene tetra flour ethylene), ECTFE (ethylene chloride triflour ethylene), TFM (modified polytetrafluoroethylene), and virgin PTFE (polytetrafluoroethylene).

23. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 21, wherein the foil ~~is~~ comprises an extruded plastified fluoroplast; selected from ~~a~~ the group consisting of PFA (perfluoro alkoxy), FEP (Fluorinated ethylene propylene, TFE (tetra flour ethylene), ETFE (ethylene tetra flour ethylene), ECTFE (ethylene chloride triflour ethylene), TFM (modified polytetrafluoroethylene) ~~or~~ and similar materials.

24. (Currently Amended) A moulding device according to ~~any of the~~ claim 15 to 23, wherein the first and second mould parts are assembled over an annular airtight sealing member encompassing the moulding volume carrying the inner liner, ~~thus said~~ airtight sealing member belonging to the second mould part, which may be clamped onto the first mould part.

25. (Currently Amended) A moulding device according to claim 24, wherein the sealing member between the first and second mould part comprises two annular sealing members defining an annular sealing volume around the moulding volume, and vacuum is applied to ~~the~~is annular sealing volume.

26. (Currently Amended) A moulding device according to claim 25, wherein ~~the a~~ vacuum V_1 in the sealing volume is larger than ~~the a~~ vacuum V_1 in the moulding volume during the vacuum forming process.

27. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 26, wherein the inner liner is pre-shaped ~~so that it~~to corresponds to ~~the a~~ shape of the product to be moulded.

28. (Currently Amended) A moulding device according to ~~any of the~~ claims 15 to 27, ~~whereby~~ wherein the foil is a fluoroplastic laminated foil, ~~preferably~~ with a thickness of 0.05 to 1.5 mm; which can be assembled in small or big panels suited to the products to be moulded.

29. (Currently Amended) An inner liner for a vacuum infusion moulding process for ~~the~~ manufacture of fibre reinforced composite products, ~~whereby comprising:~~ a product moulding volume is defined between the inner liner, constituting a first mould part, and a second mould part, wherein and the moulding volume is in fluid contact ~~to~~with at least one moulding material reservoir and a vacuum source, and wherein the moulding material is drawn into the moulding volume when the vacuum is applied to the moulding volume, and wherein the inner liner is a pre-shaped, flexible modified fluorinated plastic foil.

30. (Currently Amended) An inner liner according to claim 29, wherein the laminate ~~consists of at least two, preferably three~~ comprises a plurality of layers of a fluoroplastic material; selected from ~~a~~the group consisting of PFA (perfluoro alkoxy), FEP (Fluorinated ethylene propylene, TFE (tetra flour ethylene), ETFE (ethylene tetra flour ethylene), ECTFE (ethylene chloride triflour ethylene), TFM (modified polytetrafluoroethylene), and virgin PTFE (polytetrafluoroethylene).